

BEGIN

REEL # 435

POLSHIN, V.R.

POL'SHIN, V. R.

Machine is used in an efficient way. Zashch. rast. ot vred. i
bol. 5 no.11:22-23 N '60. (MIRA 16:1)

1. Starshiy mekhanik sveklosovkhoza "Deryuginskiy",
Dmitriyevskiy rayon, Kurskoy oblasti.

(Spraying and dusting in agriculture)

CHARGEYSHVILI, A.K., prof.; TOKHADZE, T.L., kand.med.nauk; POL'SHIN, V.V.

Electromyographic study of speech as a means of study of the functional state of auditory analysors. Vest.otorin. 21 no.3:9-13 My-Je '59. (MIRA 12:9)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof.A.K. Chargeyshvili) Tbilisskogo meditsinskogo instituta.

(SPEECH

electromyography in study of funct. state of auditory analysor (Rus))

(HEARING, physiol.

auditory analysor, determ. of funct. state by electromyography of speech (Rus))

POL'SHINSKIY, V.V.

Octane level of alkylbenzene mixed with gasoline components.
Khim.i tekhn.topl.i masel 5 no. 11:29-34 N '60. (MIRA 13:11)

1. Tatarskiy nauchno-issledovatel'skiy neftyanoy institut.
(Gasoline--Antiknock and antiknock mixtures)
(Benzene)

POL'SHIKOV, P.

West Germany's economic expansion in Africa. Vnesk. torg. 41
no. 3:13-20 '61. (MIA 14:2)

(Germany, West--Foreign economic relations--Africa)
(Africa--Foreign economic relations--West Germany)

ZAKHAROV, M.K., kand. tekhn. nauk; BOYAR-SOZONOVICH, S.P., kand. tekhn. nauk;
SHUSTER, A.Ye., inzh.; POL'SHINSKIY, V.M., inzh.

Reducing drum-type motors for driving belt conveyers. Energ.
i elektrotekh. prom. no.4:41-42 O-D '65. (MIRA 19:1)

LAVRENT'YEV, V.I. Prinimali uchastiye: POL'SHINSKIY, V.V., starshiy nauchnyy sotrudnik; AKOPOVA, A.A., starshiy nauchnyy sotrudnik; SHAYKHUTDINOVA, L.K.; inzh.; SHAGEYEVA, L.A.; inzh.; TUMANOVA, A.M., preparator; STAROSTIN, P.A., inzh.; BALAKHONOV, A.P., motorist; ARTEM'YEV, V.G., motorist.

Using the heavy residual fractions of Tatar sour crude as a fuel for gas turbines. Nefreper. i neftekhim. no. 4:27-34 '63
(MIRA 17:7)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut.

OL. NICHAYEVSKIY, VADIM VLADIMIROVICH.

3095/3
021.01
.17

Yakutiya; Ispovedi, lyudi, khozyaystvo
(Yakutsk; Natural Factors, Population,
Economy) Moskva, Akademiya, 1957.

196, (1) P. Illus., Maps, Tables
(Akademiya Nauk SSSR. Nauchno-popular-
naya literatura)

REA

POISHKOV, M.K.

Problems in the theory and calculation of electrodynamic seismographs
taking into account the input circuit of seismic amplifiers. Prikl.
geofiz. no.25:37-54 '50. (MIRA 13:6)
(Seismometers)

BEREZA, G.V.; SLUTSKOVSKIY, A.I.; POLSHKOV, M.K.

Frequency analysis of seismic vibrations. Prikl. geofiz. no. 11:92-123
'54. (MLRA 8:10)

(Seismology)

POLSHKOV, M.K.; BEREZA, G.V.

Using wide-band equipment in seismic prospecting. Razved. i prom.
geofiz. no.16:63-67 '56. (MLRA 10:8)
(Prospecting--Geophysical methods)

Polshkova, M. K.

Call Nr: 1119002

AUTHORS: See Table of Contents

TITLE: A Dynamic Theory of the Propagation of Seismic Waves
(Voprosy dinamicheskoy teorii rasprostraneniya
seismicheskikh voln) First Collection (Sbornik 1)

PUB. DATA: Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo
neftyanoy i gorno-toplivnoy literatury, Leningrad-
skoye otdeleniye, Leningrad, 1957, 386 pp., 1900
copies.

ORIG. AGENCY: Ministerstvo neftyanoy promyshlennosti SSSR.
Nauchno-issledovatel'skiy institut geofizicheskikh
metodov razvedki (NIIGR)

EDITORS: Editors: Polshkova, M. K. and Petrashen', G. I.;
Editor-in-Chief: Fedotova, M. I.; Tech. Ed.:
Gennad'yeva, I. M.: Corrector: Segal', Z.G.

PURPOSE: This collection is intended for seismologists and
particularly exploration seismologists and senior
university and graduate students interested in geo-
physics and in the theories of elasticity and
acoustics.

Card 1/6

Call Nr: 1119002

A Dynamic Theory of the Propagation of Seismic Waves (Cont.)

COVERAGE:

This book is the result of studies by specialists in the dynamic theory of elasticity and theoretic seismology at the Leningrad Branch of the Mathematics Institute, Academy of Sciences, and Leningrad University. This symposium presents a basic dynamic theory of propagation of seismic waves in plane-parallel isotropic media and a method for the quantitative application of theoretical conclusions to the fields of seismology and seismic exploration. The treatment is strictly mathematical and simple methods of constructing wave fields are indicated. The shift of wave fields, a result of reflections from one or more horizons is made evident and the rules for determining such a shift of components are established. Formulas are given for the main components in the displacement of wave fronts, as well as methods for constructing theoretical seismograms for the reflected and first-arrival waves. Some of the conclusions appear in print for the first time. The increased complexity of geological-structural prob-

Card 2/6

Call Nr: 1119002

A Dynamic Theory of the Propagation of Seismic Waves (Cont.)

lems in oil-bearing areas diminishes the efficiency of existing techniques. Therefore a careful study of these articles may lead to application of the dynamic theory described in interpreting seismograms. The first article (pp. 7-69) by Petrashen' discusses the most typical problems in wave propagation and the method of their solution. Simplification of the final formulas computed for the components of the fields of displacement is the main consideration. The second article by Petrashen' (pp. 70-163) describes the general quantitative theory of reflected and first-arrival waves. The third article, that by Petrashen' and Manukhov, considers wave intensities and data on the parameters required in composing theoretical seismograms. The fourth and fifth articles examine the method of composing such theoretical seismograms. The concluding articles examine wave propagation in an elastic semi-space. No personalities are mentioned; there are bibliographic references at the end of each article.

Card 3/6

Call Nr: 1119002

A Dynamic Theory of the Propagation of Seismic Waves (Cont.)

TABLE OF CONTENTS

Preface

4

- Ch. I. Petrashen', G. I. Solution of Problems of Propagation of Seismic Waves in Isotropic Media of Plane-parallel Layers of Sufficient Thickness (Guide) 7-69

No personalities are mentioned; there are 4 references, all USSR.

- Ch. II. Petrashen', G. I. General Quantitative Theory of Reflected and First-Arrival Waves Excited in Layered Media With Plane-Parallel Boundaries. 70-163

No personalities are mentioned; there are 9 references, all USSR.

- Ch. III. Petrashen', G. I., Manukhov, A. V. Use of Tables in computing the Intensity of Reflected and First-Arrival Waves 164-212

No personalities are mentioned; there are 6 references, all USSR.

Card 4/6

Call Nr: 1119002

A Dynamic Theory of the Propagation of Seismic Waves (Cont.)

Ch. VII. Ogurtsov, K. I., Uspenskiy, I. N. and Yermilova, N.I.
Quantitative Investigations of Wave Propagation in
the Simplest of Elastic Media 296-365

No personalities are mentioned; there are 5
references, all USSR.

Ch. VIII. Some Explanations for the First Four Articles
of this Collection

366-386

AVAILABLE: Library of Congress

Card 6/6

POLSHKOV, M.K.; SLUTSKOVSKIY, A.I.

Some theoretical and computational aspects of the output cascade
of seismic amplifiers and galvanometers. Prikl. geofiz. no.18:
61-77 '58. (MIRA 11:5)

(Seismometry)

POLSHKOV, M. K., GODIN, Y. N., RYABINKIN, L. A., FEDYNSKIY, V. V., and
FOTIADY, E. E.

"Progress of Geophysical Methods of Prospecting for Oil and Gas in
the USSR."

Report submitted at the Fifth World Petroleum Congress, 30 May -
5 June, 1959. New York City.

FOLSHKOV, M. K. Doc Tech Sci -- "Processes of Settling and the resolving capacity of seismic apparatus." Mos, 1960 (Min of Higher and Secondary Specialized Education RSFSR. Mos Order of Labor Red Banner Inst of Petrochemical and Gas Industry im I. M. Gubkin). (KL, 1-61, 190)

-156-

S/165/60/000/004/011/012
A104/A129

AUTHORS: Godin, Yu.N., Shneyerson, M.B., Yefimkina, S.S., Polshkov, M.K.

TITLE: Investigation of sloping structures of the Russian stage by the correlation method of refracted waves

PERIODICAL: Akademiya nauk ^Turkmen'skoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 4, 1960, 81 - 84 ✓

TEXT: In spite of the satisfactory results achieved by the method of reflected waves, which helped to disclose a number of structures in the Russian stage, the problem of successful geophysical prospecting of sloping, i.e., potential oil and gas bearing structures has not been solved. In some areas available equipment and prospecting methods fail to ensure proper tracing of waves reflected from the boundary of Devon and carbonaceous stages. In view of this it has been decided to try the correlation method of refracted waves. After some attempts in 1945-46 and 1951 a new prospecting series was commenced by members of the Volgo-Ural'skaya (Tuymazinskaya) geophysical expedition of the Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki [VNIIGeofiziki] (All-Union Scientific Research Institute of Geophysical Prospecting Methods under the

Card 1/3

Investigation of sloping structures ...

S/165/60/000/004/011/012
A104/A129

supervision of Yu.N. Godin. It was established that primary waves from Devon and carbonaceous boundaries have stable kinetic and dynamic properties, extensive tracing ranges and are easily distinguishable even in areas where the recording of reflected waves was thwarted by interferences. So far, prospecting has been carried out in the following areas of the Volga-Ural Region: Orenburgskaya, Saratovskaya and Kuybishevskaya Oblast' RSFSR, Bashkirskaya and Tatarskaya ASSR and northern areas of Kazakhskaya SSR. Standard ПСС-60 (PSS-60) and СС-30/60 (SS-30/60) installations were used. Seismic waves were recorded at mid-frequency filtration with a maximum response of 30 - 35 c/s and a filtering band of 15-25 c/s. Basic profiles were oriented crosswise to the assumed expansion of rocks. To overcome the difficulties in the interpretation of the hodographs of reflected waves, a special correction method was worked out (Ref. 4: G.I. Ovanesov Poiski struktur v BASSR [Structure prospecting in BASSR], Geologiya nefi, no. 10, 1958). The method is based on simultaneous use of direct and reversed hodographs of deep waves corresponding to the refracted strata of Devon and carbon deposits and line t_0 of the first refracted stratum. Mathematical analysis shows that this method enabled the location of structures with amplitudes of 50 m and above to be made. In some areas the study of refracted waves should be coupled with the recording of reflected waves and the method of individual seismic sounding is recommended

Card 2/3

Investigation of sloping structures ...

S/165/60/000/004/011/012
A104/A129

for this purpose. Conclusions: Prospecting by the correlation method of refracted waves carried out in the Bishidinskoye Upheaval, Serafimsko-Baltayevskiy terrace and Dimitrovskaya Structure was confirmed by drilling results. Exploration of virgin areas (Blizhneye Saratovskoye Zavol'zhe, Orenburgskaya Oblast') provided information on their tectonic formation and disclosed a number of anticlinal crests in the refracted strata. The described method opens new fields to seismic prospecting in south-eastern regions of the Russian stage. Satisfactory results were achieved in the USSR and UzSSR. There are 2 figures and 6 Soviet-bloc references.

ASSOCIATION: VNIIGeofiziki

SUBMITTED: March 1, 1960

Card 3/3

9.9865

also 2406

S/165 0000/004.008/012
A104/1.19

AUTHOR: Polshkov, M.K.

TITLE: Concerning the theory of transient phenomena in seismic amplifiers

PERIODICAL: Akademiya nauk Turkmenekov SSR, Izvestiya, Seriya fiziko-matematicheskiye, khimicheskiye i geologicheskiye nauki, no. 4, 1960, 60-67

TEXT: In order to determine the ability of RC amplifiers with low-pass filters to distinguish seismic waves moving in quick succession, the transient phenomena in the intermediate stages of above amplifiers with π -type low-pass filters were studied, in order to determine their resolving time. The processing involves the operational calculus and the well-known conditions of higher algebra. The equivalent circuit of the intermediate stage is shown in Fig. 1 and contains following symbols: E_1 - input voltage of amplifier; R_1 - internal resistance of tube; R_2 - anodic resistance; C_{tr} - transient capacitance; C_{π} - capacitance of π -type low-pass filter; R_{π} - resistance of self-induction of π -type low-pass filter; R_g - resistance in the grid circuit of subsequent stage; I_1 , I_2 , I_3 and I_4 - corresponding circuit currents. The calculation is based on the system of four equations of circuit currents. It is as-

Card 1/3

Concerning the theory ...

20/04

9/163.10/001.00-008/012

A104/A124

assumed that the capacity of filter C is lower by one order than the transient capacity of amplifier C_0 and that the static resistance of stage R and the wave resistance of filter R_1 are low in comparison to the resistance in the grid circuit of the subsequent stage. The expression for the seismic amplifier output is derived assuming that there is a single input pulse and by applying the algebraic theorem on an existing connection between the roots and the coefficients of an equation and the well-known Newton theorem. The expression in respect of the transient electromotive force at the output of the amplifier (time function) is obtained upon integration according to x , differentiation according to time t and necessary permutations. Phase and frequency response, as well as transient voltage are shown. Conclusions: It was established that transient processes have a quasi-periodical character. RC amplifiers with π -type filters are critical to the distortion of seismic signals and their resolving time is generally low. The distorting influence affects particularly the entry of the first of a series of seismic oscillations. There are 4 figures.

ASSOCIATION: VNIIGeofiziki

SUBMITTED: March 1, 1960

Card 2/3

POLSHKOV, M.K.

Theory and method of calculating a rheostat amplifier with a
band filter. Prikl.geofiz. no.24:222-245 '60. (MIRA 13:6)
(Seismometry)

S/552/60/000/028/003/006
H000/H000

AUTHOR: Polshkov, M.K.

TITLE: Transient processes in a seismic rheostat-type amplifier with π -filters

SOURCE: Prikladnaya geofizika (sbornik statey), no. 28, 1960, 35-49

TEXT: The article deals with the theory of transient phenomena in the intermediate cascade of a seismic rheostat amplifier with high-frequency elimination π -filters during single pulse excitation at the input. Transient phenomena studies are important in increasing the resolving power of both amplifier and the entire seismograph-amplifier-galvanometer channel. Seismic amplifiers with both high- and low-frequency elimination filters are examined, and the following findings are reported: 1) In all four cases studied, the transient processes have a quasiperiodic character. 2) The transient processes attenuate most rapidly when the amplifier parameters satisfy the equalities $C = C_g$

Card 1/3

Transient processes in (Cont.)

S/552/60/000/028/003/006
H000/H000

and $R = R_g = \sqrt{L/C}$. 3) Transient processes attenuate relatively rapidly when the amplifier parameters satisfy the relations $C \ll C_g$ and $R = R_g = \sqrt{L/C}$. 4) When other relations prevail between the parameters of the amplifier circuit, transient processes have a clearly defined quasiperiodic character and attenuate very slowly. It is noted that the transient process has the smallest attenuation coefficient when the filter capacitance C is commensurate with the transfer capacitance C_g and the reduced resistance R is small compared to the leakage resistance R_g (i.e., when $C = C_g$ and $R = \sqrt{L/C} \ll R_g$). This produces quasiperiodic oscillations of small amplitude, but a process of maximal duration, which agrees completely with the sharp frequency characteristic maximum observed for these parameter relationships. A broader amplifier frequency characteristic maximum is observed when $C \ll C_g$ and $R = \sqrt{L/C} \ll R_g$. This produces a weakly attenuating transient process of greater intensity than any other case examined. 5) Maximum curvature of the frequency characteristic is obtained with the relations $C = C_g$ and $R = \sqrt{L/C} \ll R_g$. Frequency

Card 2/3

S/169/61/000/012/015/089
D228/D305

AUTHOR: Polshkov, M. K.

TITLE: A procedure for calculating the established processes in a seismic amplifier of the rheostat type

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1961, 26, abstract 12A264 (V sb. Razved. i promysl. geofiz. no. 37. M., 1960, 35-41)

TEXT: The calculation is given for established phenomena in the intermediate cascade of an amplifier with an upper frequency filter in the case when the adduced resistance of the amplifier's cascade, the wave resistance of the filter, and the resistance in the grid circuit of the next cascade are approximately equal. It is shown that, in addition, the established processes have a quasi-periodic character and that the decrease in the capacity of the filter in comparison with the transient

Card 1/2

POLSHKOV, M.K.

Transient phenomena in an electrodynamic seismograph and calculation
of the effect produced by the input circuit of the amplifier.
Razved. i prom. geofiz. no.38:62-76 '60. (MIRA 14:3)
(Seismometry)

FEDYNSKIY, V.V., red.; DAKHNOV, V.N., red.; VASIL'YEV, V.G., red.; KALENOV, Ye.N., red.; KOMAROV, S.G., doktor tekhn. nauk, red.; POLSHKOV, M.K., red.; RYABINKIN, L.A., red.; PERSHINA, Ye.G., vedushchiy red.; MUKHINA, E.A., tekhn. red.

[Manual for geophysicists in four volumes] Spravochnik geofizika v chetyrekh tomakh. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gornotoplivnoi lit-ry. Vol.2. [Geophysical methods of well logging] Geofizicheskie metody issledovaniia skvazhin. Pod red. S.G.Komarova. 1961. 760 p. (MIRA 14:11)

(Oil well logging)

S/169/62/000/005/016/093
D228/D307

AUTHORS: Godin, Yu. N., Polshkov, M. K., Ryabinkin, L. A., Fedynskii, V. V. and Fotiadi, E. E.

TITLE: Development of geophysical methods of prospecting for oil and gas in the USSR

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1962, 23-24, abstract 5A181 (V sb. 5-y Mezhdunar. neft. kongress, v. I, M., Gostoptekhnizdat, 1961, 237-256)

TEXT: A report is given about the extent of geophysical operations and about the geographic disposition of geophysical parties on USSR territory. The main achievements in the procedure and the technique of geophysical investigations are considered. These include the development of: A magnetometer, based on the principle of free nuclear induction; a quartz gravimeter with increased damping; a gradiometer; the procedure and the apparatus of the telluric content and magnetotelluric measurement methods; portable seismic stations; fluvial seismic prospecting; marine seismic prospecting, in which

Card 1/2

S/194/62/000/002/018/096
D230/D301

3,9300
AUTHOR:

.Polshkov, M. K.

TITLE:

Theory of an electrodynamic seismograph installed on the ground, with input stage monitoring of the seismograph amplifier

PERIODICAL:

Referativnyy zhurnal, Avtomatika i radioelektronika, no. 2, 1962, abstract 2-2-47n (Geologiya i geofizika, 1961, no. 1, 86-97)

TEXT: The frequency response is considered of an electromechanical system consisting of an electrodynamic seismograph installed on the ground, the ground having elasticity and attenuation. The investigation was made by constructing a transition from the contour image of the system to an equivalent mechanical system, and then to an electrical model. For this purpose a system of equations for contour currents was set-up and solved. Recommendations about the rational relationship of the system parameters are given by considering a number of special cases. 5 figures. 2 references. [Abstracter's note: Complete translation.]
Card 1/1

POLSHKOV, M.K.

Theory of the electrodynamic seismograph: installed on the ground
considering the seismic amplifier input circuit. Geol. i geofiz.
no.2:97-104 '61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofiziki, Moskva.
(Seismometers)

POLSHKOV, M.K.

Movement of the galvanometer loop in the interconnected system
"electrodynanic seismograph -- seismic galvanometer." Izv.
AN Turk. SSR. Ser. fiz., tekhn., khim. i geol. nauk no.6:54-
63 '61. (MIRA 15:3)

1. Otdel razvedochnoy geofiziki i seysmologii AN Turkmenskoy
SSR.

(Seismometers)

S/169/62/000/006/015/093
D228/D304

AUTHORS: Polshkov, M. K. and Kudymov, B. Ya.

TITLE: State and means of increasing the effectiveness of geophysical methods of searching and prospecting for useful minerals

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 6, 1962, 20, abstract 6A141 (Sov. geologiya, no. 10, 1961, 68-74)

TEXT: The successes of geophysical prospecting methods, especially in the field of seeking oil and gas, are noted. These are due to the improvement of apparatus and to the introduction of new survey techniques. A scientifically substantiated complex of geologico-geophysical investigations, allowing searches and prospecting to be conducted by the most rational methods with the reduction in the volume of structural drilling at the expense of seismic surveying, has been developed in recent years. The prospects are considered for raising the precision of depth determinations during mapping by seismic survey methods. The use in seismic surveying of transverse

Card 1/3

S/169/62/000/006/015/093
D228/D304

State and means

waves in place of longitudinal ones is extremely perspective. Much success will be achieved in the field of the detailed study and the mapping of intricately formed structures thanks to the introduction of the seismic method of controllable set reception. It is apt to employ the correlation refraction method for regional investigations of the basement surface and the method of deep seismic sounding for deeper crustal horizons. Regional investigations have covered the Soviet Union's extensive territories; in the authors' opinion, the time is ripe for organizing systematic work on the geological depth mapping of the USSR's territory on 1:1,000,000 sheets and, in places, on a larger scale. New methods of electric prospecting -- telluric currents, electromagnetic field formation, magnetotelluric profiling -- are being successfully used. Equipment for frequency electric sounding will be fully developed within the next few years. The method of gamma-gamma-logging is being successfully applied to investigate angle holes. The material composition of rocks is being studied by neutron methods. Research is being conducted on the use of nuclear, magnetic, and paramagnetic resonance for prospecting purposes. An extremely urgent problem is to expose oil pools in high-

Card 2/3

POLSHKOV, H.K.

Frequency-phase distortions in a bound system "electrodynamic seismograph installed on the ground with seismic amplifier input circuit recording". Geol. i geofiz. no.11:108-114 '61.

(MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki, Moskva.

(Seismometers)

POLSHKOV, M.K.

Processes being stabilized in seismic amplifiers with the
T-shaped filters of high and low frequencies. Prikl.geofiz.
no.30:72-78 '61. (MIRA 14:10)
(Seismometers)